#### AIR WAR COLLEGE

## AIR UNIVERSITY

# REIKI: APPLICATION AS A MODALITY OF INTEGRATIVE THERAPY FOR TREATING POST-TRAUMATIC STRESS DISORDER AND OTHER WOUNDED WARRIOR ISSUES

by

Tesa L. Lanoy, Civilian, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Captain Alan D. Dorrbecker, USN

17 February 2015

Report Docume	Form Approved OMB No. 0704-0188					
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302 Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number						
1. REPORT DATE 16 FEB 2015	3. DATES COVERED 00-00-2015 to 00-00-2015					
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER				
Reiki: Application As A Modality of In	5b. GRANT NUMBER					
Post-Traumatic Stress Disorder And C	Sther wounded warrior issues	5c. PROGRAM ELEMENT NUMBER				
6. AUTHOR(S)		5d. PROJECT NUMBER				
		5e. TASK NUMBER				
		5f. WORK UNIT NUMBER				
7. PERFORMING ORGANIZATION NAME(S) AND AI Air War College, Air University,,Max	8. PERFORMING ORGANIZATION REPORT NUMBER					
9. SPONSORING/MONITORING AGENCY NAME(S) A	10. SPONSOR/MONITOR'S ACRONYM(S)					
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)					
12. DISTRIBUTION/AVAILABILITY STATEMENT						

#### Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

#### 14. ABSTRACT

Post-Traumatic Stress Disorder (PTSD) and suicides are on the rise in our military. After more than a decade of war, a large number of our servicemen and women are returning home broken, some with physical scars, others with scars that are not as visible, but life-changing, nevertheless. More than 400,000 servicemen and women are suffering with battle scars of PTSD, major depression and combat-related stress; 320,000 suffer from traumatic brain injury. Treatment for mental health issues is challenging and a single treatment approach does not work for everyone. As a result, DOD has moved towards development of an integrative treatment plan, using alternative medicine to complement conventional medicine, for treating this type of mental health disorders. Reiki is a complementary health approach in which practitioners place their hands lightly on or just above a person, with the goal of facilitating the person???s own healing response. It is based on an Eastern belief in an energy that supports the body???s innate or natural healing abilities and has been studied for a variety of conditions, including pain, anxiety, fatigue, and depression. This paper analyzes how and why Reiki could be incorporated as a healing therapy within DOD as part of an integrated care program. There has been little high-quality research on Reiki. Case studies conclude the benefits of Reiki are unclear but no harmful side effects have been shown. This paper argues that though scientific evidence is lacking, the benefits derived are indisputable. Private hospitals have incorporated Reiki with significant success against symptoms similar to those experienced by PTSD sufferers and continue to search for additional ways to use it. Therefore, this paper recommends that DOD include Reiki as complementary therapy for an integrated treatment approach for PTSD and other wounded warrior issues.

15. SUBJECT TERMS

16. SECURITY CLASSIFIC	CATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a REPORT	b ABSTRACT	c THIS PAGE	Same as	36			
unclassified	unclassified	unclassified	Report (SAR)				

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18

# DISCLAIMER

The views expressed in this academic research paper are those of the author and do not reflect the official policy or position of the U.S. government, the Department of Defense, or Air University. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.



# **Biography**

Ms. Tesa Lanoy is assigned to the Air War College, Air University, Maxwell AFB, AL. Ms. Lanoy, a native of Ohio, began her civil service career as a cooperative education student with the Air Force Audit Agency at Wright-Patterson AFB, OH. Throughout her career with the Air Force Audit Agency, she served in many positions and locations in the United States and overseas. Ms. Lanoy deployed to support contingency operations in Iraq and Afghanistan. She also served on the Senate Committee for Homeland Security and Governmental Affairs, Subcommittee for Contracting Oversight as a Department of Defense (DOD) Legislative Fellow. Prior to attending Air War College, Ms. Lanoy was the Chief of Supply Programs, Resource Integration, Deputy Chief of Staff Logistics, Installations and Mission Support, Headquarters U.S. Air Force and provided logistics support through planning, programming, budgeting and execution for replenishment of fuel and spare parts associated with the Air Force Flying Hour Program. Ms. Lanoy is also a Reiki Master.

sitv-Maxwel

#### Abstract

Post-Traumatic Stress Disorder (PTSD) and suicides are on the rise in our military. After more than a decade of war, a large number of our servicemen and women are returning home broken, some with physical scars, others with scars that are not as visible, but life-changing, nevertheless. More than 400,000 servicemen and women are suffering with battle scars of PTSD, major depression and combat-related stress; 320,000 suffer from traumatic brain injury. Treatment for mental health issues is challenging and a single treatment approach does not work for everyone. As a result, DOD has moved towards development of an integrative treatment plan, using alternative medicine to complement conventional medicine, for treating this type of mental health disorders. Reiki is a complementary health approach in which practitioners place their hands lightly on or just above a person, with the goal of facilitating the person's own healing response. It is based on an Eastern belief in an energy that supports the body's innate or natural healing abilities and has been studied for a variety of conditions, including pain, anxiety, fatigue, and depression. This paper analyzes how and why Reiki could be incorporated as a healing therapy within DOD as part of an integrated care program. There has been little highquality research on Reiki. Case studies conclude the benefits of Reiki are unclear but no harmful side effects have been shown. This paper argues that though scientific evidence is lacking, the benefits derived are indisputable. Private hospitals have incorporated Reiki with significant success against symptoms similar to those experienced by PTSD sufferers and continue to search for additional ways to use it. Therefore, this paper recommends that DOD include Reiki as complementary therapy for an integrated treatment approach for PTSD and other wounded warrior issues.

#### Introduction

America is in a situation that it has never been in before. More of our troops are returning home from the battlefield than during any other time in our history. This is great news but it also brings with it challenges as these heroes are not coming back completely whole. Many of them are returning home missing limbs and eyes and with brain injuries. Due to the significant advancements in medicine many are able to overcome their physical injuries and reintegrate back into society "damaged but not defeated."<sup>1</sup> However, a large majority of our heroes are returning home with injuries that are not easily seen. Many are coming home with injuries that are cutting them deeper and impairing them more than some of the physical injuries. This brings a couple of challenges to DOD. First, how do we treat these invisible wounds and second, how do we control the rising costs of health care? Hundreds of thousands of America's servicemen and women have returned home with physical and psychological combat-related wounds. The Congressional Research Service (CRS) reported the incidence of Post-Traumatic Stress Disorder (PTSD) soared 650 percent between 2000 and 2011 to nearly 940,000 service members or former service members who suffer with at least one mental disorder.<sup>2</sup> RAND labeled these "invisible wounds."<sup>3</sup> They are wounds not as obvious but debilitating and lifechanging, nevertheless. As one vet put it, "I left the war zone, but the war zone never left me."4

This paper will discuss a treatment modality called Reiki, a light touch energy technique, shown to help reduce symptoms that impede well-being and healing such as insomnia, irritation, aggression, stress, depression and pain. Hospitals and clinics across America use Reiki to reduce anxiety before surgery, accelerate the healing process after surgery, improve mental attitude, reduce pain and promote relaxation. This paper makes recommendations to the DOD for how it can be incorporated into an integrative treatment program for treating our wounded warriors.

#### Thesis

This paper analyzes Reiki as a healing therapy DOD should consider as part of an integrated program for treating PTSD and other wounded warrior issues.

#### **Invisible Wounds**

More than 2.5 million of America's servicemen and women have bravely answered the call to fight our nation's battles overseas in Iraq and Afghanistan and thousands made the ultimate sacrifice.<sup>5</sup> However, thanks to advancements in battlefield medical care and equipment, the survival rate for wounds received in combat is over 90 percent which means a larger percentage of our heroes are coming home alive compared to previous wars such as Vietnam and Korea where survival rates from battlefield injuries were in the 80 and 70th percentiles, respectively.<sup>6</sup> These unprecedented combat survival rates are outstanding, but America has realized a side effect of the win in survivability - hundreds of thousands of our young men and women have returned home alive, but not unharmed. An extraordinary number suffer with the psychological and emotional scars of survival, emotional wounds so deep that they and their loved ones will continue to pay the price for an unknown time to come, unless we can find a way to reverse the trend and allow healing to begin.

The Wounded Warriors Project reported 400,000 servicemen and women suffer from PTSD, major depression and combat-related stress, and an estimated 320,000 have traumatic brain injury.<sup>7</sup> These "invisible" wounds should not be any less concerning than the ones that can be seen. In fact, often the invisible wounds are the most disconcerting because they can remain hidden or obscured and therefore, often left untreated. Though stress and depression are not unique to the military, servicemen and women exposed to combat experience more acute symptoms and struggle with re-acclimating to life outside the combat zone. Major depressive

disorders such as PTSD and traumatic brain injury affect mood, thoughts and behavior.<sup>8</sup> The

National Institutes of Health (NIH) identifies the following symptoms with PTSD.<sup>9</sup>

#### Avoidance

- Avoiding people, places, things, situations that stir memories
- Hopelessness, worry, thoughts of suicide
- Feeling numb, disinterested
- Negative view of the world and people
- Feeling detached, withdrawn
- Cannot find enjoyment in anything
- Lack of trust
- Guilt, shame

#### Hyperarousal

- Trouble concentrating and making decisions
- Hypervigilance, jumpy
- Irritable, angry outbursts, frustrated
- Trouble sleeping

#### Re-experiencing

• Disturbing dreams or memories, flashbacks, nightmares

Family, friend and work relationships are negatively affected because service members struggle with these issues. These symptoms affect and interfere with all aspects of life and many service members who are normally very fit and highly motivated find it extremely difficult to cope with these feelings and many just give up the fight. As a result, suicide rates in the military are unprecedented. The Department of Veterans Affairs (VA) estimated in January 2014 that 22 veterans take their life each day and attributed these rising numbers to an inability to readjust to

civilian life and living with combat injuries such as PTSD.<sup>10</sup> In an attempt to reverse this trend,

President Obama included mental health as one of the priorities for reforming the VA stating,

"We have to end this tragedy of suicide" and as "long as any service member or veteran is

suffering, or feels like they have nowhere to turn" we must continue to do more.<sup>11</sup>

"Invisible" wounds are poorly understood, different for each person and as a result, gaps exist in how to treat them. Studies continue and doctors are hopeful that PTSD may be reversible if veterans can be treated and given tools to help cope with the conditions they are experiencing.<sup>12</sup> Acknowledging the interrelationship of body, mind and spirit, caregivers must capitalize on the benefits of integrating conventional medicine with alternative medicine when treating mental health problems.

#### **Integrative Medicine**

Integrative Medicine is a comprehensive and dynamically responsive plan for health that includes Mind-Body Connection, complex connections between state of mind and basic psychological functions in the body.<sup>13</sup> Mind-body skills can have a profound impact on health, activate the body's automatic healing response and reduce the harmful effects of stress. Shortcomings of conventional treatments and established models of mental health care invite an urgent open-minded dialogue on a range of promising non-conventional treatments and innovative concepts in care delivery.<sup>14</sup> The US Department of Health established the National Center for Complementary and Alternative Medicine (NCCAM) under the NIH to conduct and support research and provide information about complementary health products and practices.<sup>15</sup> The NCCAM acknowledges the benefits derived from alternative medicine and continues to sponsor studies on various treatment options.

In response to the growing number of military members with PTSD and other war-related mental issues, DOD established the National Intrepid Center of Excellence (NICoE) at the Walter Reed National Military Medical Center in Washington D.C.<sup>16</sup> Through the NICoE, DOD is taking steps to incorporate alternative medicine and therapies to treat wounded warriors. As discussed above, mental health disorders are difficult to treat and "not every treatment or therapy modality works for every patient, but the variety of programs [available at NICoE] encourages

them to keep trying."<sup>17</sup> Acupuncture, yoga, and meditation are complementary alternative medicine approaches being used in DOD today.

Results have shown that "service members who take advantage of integrative health care have more control of their pain, are able to decrease or stop their medications, and are less anxious, less irritable, more relaxed, sleep better and exhibit better interpersonal skills."<sup>18</sup> Of those who sought care, one third did not find the available treatment modalities effective. In addition, 45 percent were concerned about drug therapy side effects. <sup>19</sup> "Service members are seeking out non-drug complementary and integrative medicine as part of their overall care and approach to wellness," said Wayne B. Jonas, MD, president and chief executive officer of Samueli Institute. He concludes that studies using these therapies "underscore the need to make effective, non-stigmatizing treatments for PTSD available to all our Service members."<sup>20</sup> Reiki is one of the alternative medicine modalities that should be considered by caregivers to complement conventional treatment of mental health issues.

# What is Reiki?

Reiki is a holistic energy healing treatment used to reduce stress, relieve pain, induce relaxation, and release emotional blockages to accelerate the body's natural healing ability.<sup>21</sup> It is an eastern practice founded in Japan and based on the belief that injury, dysfunction and disease are manifestations of weak, unbalanced or blocked vital energy. Reiki, similar to acupuncture, is performed to optimize energy and remove energy blockages to facilitate both physical and emotional wellness.<sup>22</sup>

The concept is related to acupuncture energy meridians and the idea that we are made up of an energy system.<sup>23</sup> Reiki practitioners place hands lightly on or just above a person within their energy field with the intent of facilitating the person's own healing response. Reiki is non-

invasive and can be especially helpful in treating patients who are sensitive to touch or whose symptoms risk being complicated from other manipulative therapies such as massage. No special tools are required to perform Reiki so it can be performed anywhere; for example, while the patient is sitting in a chair, on a massage table or lying on a bed. Though a quiet, dedicated place is optimal, it is not always possible and benefits can be derived regardless. Furthermore, though a full treatment session can last from 45-90 minutes, the calming benefits of Reiki can be derived in only a 15-20 minute treatment. An extract from the Allegheny General Hospital Reiki brochure describing what to expect during a Reiki treatment is included in Appendix A.

#### **Case Studies on Reiki**

There is a prevailing adversity in the medical community to any process or procedure that has not been scientifically proven. However, many advances in medicine, which are commonplace today, were not scientifically proven when doctors first used them. Two examples are open heart surgery and heart transplant. The first open heart surgery was performed in 1952 based on limited research by a Canadian surgeon who conducted open heart surgery on dogs. In 1967, a South African surgeon performed the first human heart transplant. The technique he used had been developed based on the research of an American surgeon who had performed the first successful heart transplant in a dog at Stanford University in 1959. In 1967, the American surgeon announced "he was confident enough in the research to start a clinical trial;" shortly after his announcement the surgery was successfully performed in South Africa.<sup>24</sup> By their natural attraction to the sciences and desire to understand how things work and are interrelated, doctors want evidence that a treatment is effective and safe before prescribing it to patients. Doctors also want results and those who integrate Reiki into their treatment plans see positive results.

Dr. Sheldon Feldman, Chief of Breast Surgery at New York-Presbyterian/Columbia University Medical Center, uses a Reiki master during surgery. He first saw the benefits of Reiki when his patients were receiving it in preparation for surgery, helping to get them ready for this big, life-altering event. He said it became clear to him that these patients did very well after surgery, not just in terms of their psychological state and their mental attitude, but they had very little pain and they recovered very fast. He thought, "This is valuable, why wouldn't we want to offer this to patients?"<sup>25</sup> According to Dr. Feldman. "Healers can help patients on the emotional level, which helps on the physical level. The positive impact on healing after surgery can be potentially huge."<sup>26</sup> Hospitals, universities and private foundations are continuously conducting medical research on innumerable topics at any given time. These case studies are often the stimulus for trying new techniques and procedures.

There have been many case studies conducted to evaluate the efficacy of Reiki. Researchers have examined its use for conditions such as rheumatology, arthritis, fibromyalgia, pain, stress, depression, chronic fatigue syndrome, orthopedic conditions, anxiety and overall well-being. Much of the analysis has been done in regard to management of pain and anxiety for cancer patients because, much like PTSD and brain trauma, doctors universally struggle to identify effective options for managing pain. Conventional medicine has come to acknowledge that stress and depression cause pain and pain can cause stress and depression, exacerbating existing conditions and making the disease more difficult to treat.<sup>27</sup> Chronic pain and substance abuse are also associated with PTSD.<sup>28</sup>

Case studies, by and large, have concluded the evidence is insufficient for proving the efficacy of Reiki for various reasons including "small sample size, inadequate study design, poor reporting, trial data for any one condition are scarce, and independent replications are not

available for each condition.<sup>929</sup> The Mayo Clinic staff asserts that the lack of research in complementary and alternative treatments is primarily because controlled medical studies are costly and are often funded by large drug companies.<sup>30</sup> However, there is a growing amount of research on Reiki and when the results of these case studies are plotted, overlapping data is revealed and trends appear. As exemplified in Table 1, participants experienced improvement in a number of common symptoms also seen in PTSD.

	Studies Showing Improvement <sup>a</sup>													
PTSD Symptoms	Α	B	С	D	E	F	G	Η	Ι	J	K	L	Μ	Ν
Avoidance														
Depression					Х					Х				
Mood			Х	X						Х	Χ			
Pain	Xb	Х			Х	Х	Х	Х		Х			Х	Х
Quality of Life		Χ	Χ	Dasa	aral	. T								Х
Hyperarousal/ Re-expe	riencin	ıg	nna	Nest	arti	1 111	orn	latio	no					
Anxiety	21. 2.				Х				~ Q	Х	Χ		Xc	Х
Fatigue		D.:		1.7	1.1	1	1.0			19				Х
Heart Rate			5112	u v	201	160	-UIU	113			X	X		
Insomnia									Х					
Relaxation		ir n	Х				Χ	B.P	Χ	Х	Χ	Х		
Stress			Χ	Χ	Ma	we	1.134				Х			

Table 1. Health Benefits Experienced as a Result of Reiki.

Notes

<sup>a</sup> The associated case studies are listed in Appendix B.

<sup>b</sup> The mean number of pain medications was 29 percent lower among participants assigned to Reiki masters than those seen by actors.<sup>31</sup>

<sup>c</sup> The length of surgery was longer for the control group than for the treatment group (mean = 72 minutes for control group versus mean = 59 minutes for treatment group) using the same anesthesia protocol.<sup>32</sup>

Table 1 shows that benefits are derived from Reiki, even if science has not yet been able

to measure its effectiveness. As a medical provider trained in Reiki at the Cleveland Clinic

stated, "Reiki is more of a soft science; there is nothing concrete to measure. The objective

'thing' to measure is not there."<sup>33</sup> Some of the benefits experienced, such as "spiritual

connection and enhanced self-esteem, may not be quantifiable."<sup>34</sup> Nevertheless, these are

commonly reported benefits that should not be dismissed or overlooked because very much like

the heart transplant in the 1960s, "today's complementary and alternative therapies could be tomorrow's medical breakthroughs" when it comes to treating PTSD. <sup>35</sup>

# **Hospitals Using Reiki**

The NIH acknowledges that PTSD and other war-related disorders are challenging to treat and reports that opioid medications are often prescribed for chronic pain conditions, but the use and misuse is resulting in hospitalizations and a rise in death rates.<sup>36</sup> In 2011, the *Journal of the American Medical Association, Internal Medicine* published results of a study on "Chronic Pain and Opioid Use in U.S. Soldiers after Combat Deployment" showing that of 2,597 Army infantry veterans surveyed, 44 percent had chronic pain and 15 percent regularly use opioids -- a much higher rate than the general population.<sup>37</sup> In an interview with *Stars and Stripes*, Brigadier General Richard Thomas, then Assistant Army Surgeon General, stated "This is a nationwide problem. We've got a culture of a pill for every ill."<sup>38</sup> Drug therapy for treating PTSD is not only potentially dangerous and addictive, it is costly. In 2012, DOD spent \$1B on mental disorders and approximately \$70M on drug therapies.<sup>39</sup> The DOD must continue to seek out alternative treatments to prescribing painkillers to treat PTSD related symptoms.

Doctors who have not achieved desired results from conventional medicines are turning to alternative, ancient therapies such as Reiki to complement the conventional practices. Hospitals across the globe have incorporated Reiki into their care curriculum.<sup>40</sup> In 2000, only 14 percent reported that they provided complementary therapies; by 2011 that number had grown to 42 percent.<sup>41</sup> Many have conducted studies to evaluate the benefits derived. Hartford Hospital is one such hospital and has been using Reiki for more than a decade with continually outstanding results. In 1997, the Women's Health Services at Hartford Hospital began to integrate Reiki for inpatient care in the gynecological surgical unit. The hospital conducted patient surveys and some of the comments included: "I am grateful for the pain relief and peacefulness I felt after the Reiki session"; "Reiki was the highlight of my day and I am so thankful to the volunteers"; and "I would highly recommend this program. I feel the Reiki (and guided imagery) helped me recover faster."<sup>42</sup> As a result of the positive feedback, Hartford Hospital began to look at incorporating Reiki into other units in the hospital including Cardiology, Orthopedic, Oncology, Palliative Care and the outpatient Cancer Center.<sup>43</sup> Data collected from patient surveys was analyzed and showed improved relaxation by more than 60 percent and reduced pain by more than 40 percent.<sup>44</sup> Later studies showed that sleep improved *a great deal* in 58 percent of those studied, *somewhat* in 39 percent, and *not at all* in only 3 percent of those surveyed.<sup>45</sup>

From January through June 2012, 420 adults who received Reiki at a University of Pittsburgh hospital were invited to complete a survey about how they perceived changes in their pain, mood, distress, sleep, and appetite after Reiki. A total of 145 surveys were completed, approximately one-third of participants had been seen in the cancer infusion center and twothirds in other areas of the hospital. Participant ratings are included in Table 2.<sup>46</sup>

	Ratings as a Percentage					
Perceived Changes	Cancer Infusion	Hospital At-Large				
Rate Reiki a positive experience	94	93				
Would like additional Reiki sessions	92	86				
Perceived improvements in:						
Relaxation	89	86				
Mood	81	78				
Anxiety/worry	75	75				
Attitude	75	63				
Pain	45	49				
Sleep	43	35				
Isolation/loneliness	38	43				
Appetite	30	30				

Table 2. Perceived Changes Experienced after Reiki at University of Pittsburgh Hospital.

But Hartford and the University of Pittsburgh are not the only hospitals seeing the benefits of Reiki. More than 60 other U.S. medical facilities use Reiki, among them several are nationally and regionally ranked in the top best hospitals in 2014-2015 in one or more specialties by U.S. News & World Report.<sup>47</sup> Personnel from of six of these hospitals were interviewed in order to better understand how Reiki could be used in military medical facilities to help treat PTSD symptoms. As shown in Table 3, these hospitals have been using Reiki from 6 to 17 years. Not only have most of the programs at these hospitals continued for more than a decade, they continue to expand and look for new ways to incorporate Reiki.

Medical Facility	Program Start
George Washington University Hospital	1998
Mayo Clinic	2001
Allegheny General Hospital (AGH)	2002
Cleveland Clinic	2002
Yale-New Haven Hospital	2005
Brigham and Women's Hospital – Harvard Medical School	2009

Table 3. A Survey of Hospitals Using Reiki.

A few of the hospitals conducted surveys to determine qualitatively and quantitatively whether benefits were derived; others did not conduct surveys but provided observed examples of how symptoms improved. Among their experience, the benefits were consistent. Common improvements identified by the hospitals interviewed include:

- Pain
- Anxiety
- Agitation
- Confusion
  - Stress
  - Fatigue
  - Insomnia

- Effectiveness of Conventional Methods
- Relaxation
- Mood
- Quality of Life

Patients consistently experience positive results and report relief "from numerous health challenges including mental health issues."<sup>48</sup> Feedback given after Reiki treatments at AGH indicates that patients often feel more relaxed, less anxious, better able to sleep, and less uncomfortable. When Reiki and relaxation tapes were used for patients undergoing heart surgery, patients had shorter lengths of hospital stay, less time in the intensive care unit, required blood transfusion less often, and used less pain medication.<sup>49</sup> Similarly, a survey conducted by Yale-New Haven Hospital in 2014 showed pain and fatigue improved by more than 45 percent, and anxiety and mood by approximately 60 percent. In addition, 78 percent of patients reported feeling more relaxed and another 22 percent were so relaxed they fell asleep during the session.<sup>50</sup>

One of the main reasons that Reiki use is growing among hospitals is patient demand. The Washington Post reported that at least 1.2 million adults in America have tried energy healing.<sup>51</sup> According to the Medical Director for AGH's Integrated Medicine Program, it has been "widely accepted and very popular." Integrated Medicine has even received letters stating that patients have come to AGH for care because they knew Reiki was available. But it is not just patients who are demanding the treatment, staff is too, and not just for patients but for themselves. The goal at Brigham and Women's, Yale-New Haven and George Washington University hospitals is to produce a holistic healing environment by treating not just the patient but the staff and family too because all impact the extent of patient healing. Reiki is in high demand in this community of people who are stressed out and tired and anyone who wants a treatment can receive one.<sup>52</sup>, <sup>53</sup>, <sup>54</sup>

At the hospitals interviewed, Reiki was primarily administered by volunteers through formally established volunteer programs, trained staff, or incorporation of both. Doctors, nurses and other health care providers throughout various departments have seen and experienced the benefits of integrating Reiki with their conventional treatment approach and many are getting trained. At Harvard, even professors and PhD researchers are becoming Reiki volunteers.<sup>55</sup>

Health care providers, both in the military and private sector, recognize that health is created by the balance and "dynamic integration between our environment, body, mind, and spirit."<sup>56</sup> Reiki can help people find that balance. Historically, military innovation has opened doors for advancement in the private sector. In the case of Reiki, as happened with acupuncture, the private sector is leading the way and has already overcome many of the challenges and obstacles associated with integration into conventional medicine. Hospitals use Reiki because it works; even though we may not be able to explain why. It aligns with (does not go against) principles in the Hippocratic Oath; specifically, that "there is art to medicine as well as science," and that medical providers don't treat the sickness, but a "sick human being, whose illness may affect the person's family and economic stability."<sup>57</sup> Moreover, Reiki has not been shown "to have any harmful side effects" which does not contradict the guiding principle for physicians to 'first do no harm.'<sup>58</sup> Dr. Sheldon Feldman, New York-Presbyterian/Columbia University Medical Center, acknowledges that physicians like to have studies to prove a medical treatment scientifically but states "we know as scientists that there are a lot of things that we do that we know work that we have not proven scientifically and Reiki is in that list of things."<sup>59</sup> Scientific or not, hospitals using Reiki are seeing very positive results.

#### **Other Perceived Obstacles**

Interviews with personnel in the military medical community disclosed several perceived obstacles to offering Reiki in military facilities. Concerns included insurance coverage, institutionalized training and licensure and religious affiliation.

#### **Insurance Coverage**

At present, medical insurance, including TRICARE, does not cover Reiki. Neither does it cover acupuncture nor chiropractic although both are provided in some military hospitals and clinics. <sup>60</sup> The lack of coverage, however, is not impeding patients from seeking Reiki treatment, nor did any of the hospitals interviewed see this as an impediment from offering Reiki. All overwhelmingly responded that the costs are minimal and far outweighed by the benefits. All also believe, though no formal studies to evaluate cost-benefit were identified, that Reiki reduces overall health care costs because bringing the body into a state of balance allows the effects of other treatments to be optimized. Interviewees provided numerous examples of how less anesthesia was needed for surgery and how patients healed faster when Reiki was used in conjunction with conventional treatment modalities.

#### **Training and Licensure**

Reiki training is not institutionalized and there is no national regulatory or governing organization for Reiki licensure. Practitioners are trained in a variety of ways, from one-on-one by a Reiki master to attendance at an established training institution. Hospitals interviewed did not find this to be a concern. All had a volunteer coordinator and the majority provided Reiki training to staff and volunteers, and may require a time of apprenticeship with Reiki practitioners within the program before being permitted to perform treatments on their own. Furthermore, as with other volunteer programs, applicants are screened and required to attend an orientation to acclimate them to the environment, help them understand their role in the holistic healing mission and communicate policies and procedures.

#### **Concerns over Religious Affiliation.**

Reiki is not a religion, but a "philosophy of care" that practices presence and compassion.<sup>61</sup> Caregivers with the Wounded Warrior Project have identified that "exposure to traumatic combat and operational experiences affects service members and veterans spiritually, psychologically, biologically, and socially."<sup>62</sup> People who feel more spiritually connected and grounded seem to have a more positive outlook and feel better about themselves and their situation. Pamela Miles, a "pioneer of Reiki integration into conventional health care," advocates that spiritually connected patients "may well be patients who are easier to treat and …better equipped to follow treatment protocols."<sup>63,64</sup> Finding or returning to a place of spiritual health and well-being helps to put our lives in balance, which then opens the doorway for deeper healing to begin.

# Recommendations

Solving complex problems, like PTSD, requires trying different techniques. Reiki is a low-risk option for the military in terms of patient care and cost. Neither the lack of case studies nor the other perceived obstacles presented above should prevent DOD from offering Reiki as a treatment modality in an integrated care plan. The possible pay-offs in terms of patient healing and reduced health care costs far out-weigh the risk. Hospitals interviewed for this paper have been using Reiki for more than a decade now and their experience is consistent. They continue to use Reiki and to search for ways to expand its use to provide a more holistic, caring and healing environment for the entire team which includes not only the patient but also family members and medical staff. Increased relaxation, decreased anxiety and fatigue - the results are

there; if not, these programs would cease to exist. The DOD can no longer afford to ignore the possibilities of benefits a Reiki program could bring to our troops and their families. Therefore, the following recommendations are offered in order to apply the lessons learned in the private sector for treating the debilitating symptoms of trauma to build the same healing environment within DOD.

• **Recommendation 1:** Make training opportunities available for health care providers interested in learning Reiki;

• **Recommendation 2:** Add Reiki as a complementary treatment option available for patients, families and staff as part of an integrative, holistic health care plan for wounded warriors;

• **Recommendation 3:** Hire Reiki coordinators at medical facilities that predominantly provide treatment to wounded warriors;

• **Recommendation 4:** Make Reiki available at deployed locations where trained health care providers are available; and

• **Recommendation 5:** Once established at medical facilities providing treatment for wounded warriors, consider how to integrate Reiki into other practices within military treatment facilities such as, but certainly not limited to, pain management and pre-/post-surgery.

Incorporating Reiki into an integrated, holistic treatment plan for America's heroes suffering with psychological and emotional wounds will provide caregivers and wounded warriors more options to reverse the negative trends we have seen as a result of PTSD.

# Conclusion

PTSD and mental health issues continue to rise in the military and psychological disorders can be very difficult to treat. Though PTSD is a term used mostly in relation to

military, people throughout the world suffer from chronic fatigue, stress, pain, insomnia, hopelessness, guilt, shame, confusion, depression and anger. As a result, private hospitals have pioneered the way and are continually seeking ways to reduce these symptoms so healing can occur. The benefits they are seeing cannot be refuted. The results of their work and continuous search for other ways to use Reiki to produce an overall healing environment shows they strongly believe benefits outweigh the costs. Therefore, I recommend DOD include Reiki as complementary therapy for an integrated treatment approach for PTSD and other wounded warrior issues. What have we got to lose if we try it? There is much more to lose if we do not.

More than 400,000 servicemen and women are suffering with battle scars of PTSD, major depression and combat-related stress; 320,000 of traumatic brain injury. They cannot sleep or relax. This disorder is destroying families, children are grieving and the impacts will be seen for generations. Clearly, there are no simple answers. There is no one-size-fits-all cure for treating people who have had such horrific experiences that their minds will not let them forget. But just like the battle these heroes fought, the key to winning the war against PTSD is a flexible, integrative approach of all tools available; an unconventional mentality that recognizes some tools are most effective when our conventional options are diminished. There is no guarantee of success. Reiki might not be the right tool for everyone, but as the hospitals in the private sector are experiencing, using it as part of the bigger network will enable the win we seek.

# Appendix A

# Allegheny General Hospital Brochure on Reiki<sup>65</sup>



# What is Reiki?

Reiki (pronounced ray-key) is a holistic, natural healing technique that touches on all levels of the body, mind and spirit. Reiki has been practiced for centuries throughout many cultures and because it complements allopathic (traditional western) medical treatments, has been gaining notoriety in the health care profession.

## West Penn Allegheny Health System

# What is a Reiki session like?

Reiki sessions may be performed while either sitting up or lying flat, such as on your hospital bed or a massage table, whichever position is more comfortable for you. The Reiki volunteer may suggest some calming breaths or imagery before beginning. Sessions involve a light touch or gentle laying on of hands.

# What will I feel during a Reiki session?

The Reiki experience can differ from session to session based on the patient's needs at the time. Some common feelings reported by Reiki recipients include:

- Warmth or cold
- Tingling or prickly sensations in various parts of the body
- Changes in breathing patterns
- Heaviness in arms or legs
- Feeling of lightness
- Extreme relaxation

On some occasions, the recipient does not feel any unusual sensations at all, but these feelings are not necessary for you to reap the benefits of a Reiki session.

# How will I feel after the treatment?

After a Reiki session, recipients may feel so relaxed they feel like taking a nap. Others will feel energized. Due to the variance in treatment from one individual to the next, each recipient will react differently to the session. Listen to your body and respond appropriately.

# What are some of the advantages?

Reiki can produce many benefits for the mind, body and soul, including:

- Reduced stress symptoms
- Reduced anxiety
- Accelerated natural healing
- Enhanced immune system
- Reduced pain
- Feelings of increased vitality and general well-being

# **Appendix B**

# **Case Studies**

The following is a list of case studies referenced in Table 1.

Study A: Reiki the Treatment of Fibromyalgia: A Randomized Controlled Trial<sup>66</sup>

Study B: A Phase II Trial of Reiki for the Management of Pain in Advanced Cancer Patients<sup>67</sup>

Study C: Long-Term Effects of Energetic Healing on Symptoms of Psychological Depression and Self-Perceived Stress<sup>68</sup>

Study D: A Randomised Controlled Single-Blind Trial of the Efficacy of Reiki at Benefitting Mood and Well-Being<sup>69</sup>

Study E: Effects of Reiki on Pain and Selected Affective and Personality Variables of Chronically III Patients<sup>70</sup>

Study F: Touch Therapies for Pain Relief in Adults<sup>71</sup>

Study G: The Efficacy of Reiki Hands on Healing: Improvements in Adrenal, Spleen and Nervous Function as Quantified by Electro-Dermal Screening<sup>72</sup>

Study H: Using Reiki to Manage Pain: A Preliminary Report<sup>73</sup>

Study I: The Effect of Reiki on Decreasing Episodes of Insomnia and Improving Sleep Patterns<sup>74</sup>

Study J: Effects of Reiki on Anxiety, Depression, Pain and Psychological Factors in Community-Dwelling Older Adults<sup>75</sup>

Study K: Effects of Reiki on Autonomic Activity Early After Acute Coronary Syndrome<sup>76</sup>

Study L: Immediate Effects of Reiki on Heart Rate Variability, Cortisol Levels, and Body Temperature in Health Care Professionals with Burnout<sup>77</sup>

Study M: The Effect of Reiki on Pain and Anxiety in Women with Abdominal Hysterectomies<sup>78</sup>

Study N: Pilot Crossover Trial of Reiki versus Rest for Treating Cancer-Related Fatigue<sup>79</sup>

## Notes

<sup>1</sup> Martha Raddatz, Hank Disselkamp, Richard Coolidge, and Jordyn Phelps, "Damaged but Not Defeated: The Story of Two Wounded Warriors Overcoming Their Injuries," *ABC News*, 24, May 2013, <u>http://abcnews.go.com/GMA/video/wounded-warriors-overcome-injuries-19251375</u> (accessed 12 December 2014).

<sup>2</sup> Bob Brewin, "Pentagon Spent Over \$4 Billion on Mental Health Treatment between 2007 and 2012," *Nextgov*, 22 August 2013, <u>http://www.nextgov.com/health/2013/08/pentagon-spent-nearly-1-billion-mental-health-treatment-2012/69194/</u> (accessed 2 October 2014).

<sup>3</sup> Terri Tanielian and Lisa H. Jaycox, editors, *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery,* (Santa Monica, CA: RAND Center for Military Health Policy Research, 2008), 3.

<sup>4</sup> Rajiv Chandrasekaran, "A Legacy of Pain and Pride," *The Washington Post*, 29 March 2014, <u>http://www.washingtonpost.com/sf/national/2014/03/29/a-legacy-of-pride-and-pain/</u> (accessed 17 November 2014).

<sup>5</sup> Ibid.

<sup>6</sup> Col Dallas Hack, interview by Ashley Gilleland and Noel Gunther, "Survival Rates from Combat Wounds Keep Increasing," *Brainline Military*, <u>http://www.brainlinemilitary.org/content/multimedia.php?id=6337</u> (accessed 17 November 2014).

<sup>7</sup> Wounded Warrior Project, "Who We Serve," <u>http://www.woundedwarriorproject.org/mission/who-we-serve.aspx</u> (accessed 11 November 14).

<sup>8</sup> Terri Tanielian and Lisa H. Jaycox, editors, *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery,* (Santa Monica, CA: RAND Center for Military Health Policy Research, 2008), 432.

<sup>9</sup> National Institute of Mental Health, "Post-Traumatic Stress Disorder (PTSD)," National Institutes of Health, <u>http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml</u> (accessed 11 February 2015).

<sup>10</sup> Leo Shane, III, "Report: Suicide Rate Spikes among Young Veterans," *Stars and Stripes*, 9 January 2014, <u>http://www.stripes.com/report-suicide-rate-spikes-among-young-veterans-1.261283</u> (accessed 17 November 2014).

<sup>11</sup> C-SPAN, "President Obama at American Legion Convention," 26 August 2014, <u>http://www.c-span.org/video/?321148-1/president-obama-speech-american-legion-convention</u> (accessed 12 January 2015).

<sup>12</sup> M. A. Friedman, J. B. Detweiler-Bedell, H. E. Leventhal, R. Horne, G. I. Keitner, and I. W. Miller, "Combined Psychotherapy and Pharmacotherapy for the Treatment of Major Depressive Disorder," *Clinical Psychology: Science and Practice* 11, (2004): 47–68.

<sup>13</sup> Duke Integrative Medicine, "Wheel of Health" <u>http://www.dukeintegrativemedicine.org/about-us/what-is-integrative-medicine</u> (accessed 2 October 2014).

<sup>14</sup> J. Sarris, et al, "Integrative Mental Healthcare White Paper: Establishing a New Paradigm through Research, Education, and Clinical Guidelines," Advances in Integrated Medicine 1, no. 1, (January 2014): 9-16, http://dx.doi.org/10.1016/j.aimed.2012.12.002 (accessed 2 October 2014).

<sup>15</sup> National Center for Complementary and Alternative Medicine, "Complementary Health Practices for U.S. Military, Veterans and Families." U.S. Department of Health and Human Services, National Institutes of Health, http://nccam.nih.gov/health/military-veteran (accessed 1 October 2014).

<sup>16</sup> National Intrepid Center of Excellence, http://www.nicoe.capmed.mil/SitePages/Home.aspx (accessed 16 September 2014).

<sup>17</sup> National Intrepid Center of Excellence, "Integrative Health Care Program," http://www.nicoe.capmed.mil/Shared%20Documents/CAM\_Fact%20Sheet\_FINAL\_06%2018% 2012.pdf (accessed 16 September 2014).

<sup>18</sup> Ibid.

<sup>19</sup> Terri Tanielian and Lisa H. Jaycox, editors, *Invisible Wounds of War: Psychological and* Cognitive Injuries, Their Consequences, and Services to Assist Recovery, (Santa Monica, CA: RAND Center for Military Health Policy Research, 2008), 436.

<sup>20</sup> Samueli Institute, "PTSD Symptoms in Combat-Exposed Military Reduced with Healing Touch & Guided Imagery," http://samueliinstitute.org/File%20Library/For%20Military/Healing-Touch-PTSD-FINAL.pdf (accessed 21 December 2014).

<sup>21</sup> S. Singg, "Reiki: An Alternative and Complementary Healing Therapy" in Carol M. Davis, ed. Complementary Therapies in Rehabilitation. 2d ed. (Thorofare, NJ: SLACK Incorporated, 2004), 236.

<sup>22</sup> Lauren Young, "What is Biofield Therapy?" Dr. Frank Lipman, The Voice of Sustainable Wellness, 28 November 2014, http://www.drfranklipman.com/what-is-biofield-therapy/ (accessed 12 January 2015).

<sup>23</sup> Barbara Brennan, interview by R. E. DiCarlo, "Conversations toward a New World View: Exploring the Human Energy System," Healthy.net,

http://www.healthy.net/scr/Interview.aspx?Id=165 (accessed 3 October 2014).

<sup>24</sup> Stanford Medicine News Center, "Norman Shumway, Heart Transplantation Pioneer, Dies at 83," http://med.stanford.edu/news/all-news/2006/02/norman-shumway-heart-transplantationpioneer-dies-at-83.html (accessed 14 December 2014).

<sup>25</sup> Sherry Mazzocchi, "Dr. Sheldon Feldman on Reiki and Surgery," YouTube video, https://www.youtube.com/watch?v=X29PZzrgU4I (accessed 16 December 2014).

<sup>26</sup> Columbia Surgery, "Top Surgeon to Speak at Reiki Conference, Columbia University Department of Surgery, 13 July 2012, http://www.columbiasurgery.net/2012/07/13/top-surgeonto-speak-at-reiki-conference/ (16 December 2014).

<sup>27</sup> Medline Plus, "Pain and Your Emotions," http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000417.htm (accessed 12 December 2014). MedlinePlus is a service of the U.S. National Library of Medicine, National Institutes of Health.

<sup>28</sup> Emedicinehealth, "Post-Traumatic Stress Disorder (PTSD),"
<u>http://www.emedicinehealth.com/post-traumatic\_stress\_disorder\_ptsd/page3\_em.htm</u> (accessed 13 February 2015).

<sup>29</sup> M. S. Lee, M. H. Pittler, and E. Ernst, "Effects of Reiki in Clinical Practice: A Systematic Review of Randomised Clinical Trials," *International Journal of Clinical Practice* 62, no. 6 (June 2008): 947–954.

<sup>30</sup> Mayo Clinic Staff, "Complementary and Alternative Medicine," Mayo Clinic, <u>http://www.mayoclinic.org/healthy-living/consumer-health/in-depth/alternative-medicine/art-20045267?pg=2</u> (accessed 20 August 2014).

<sup>31</sup> N. Assefi, A. Bogart, J. Goldberg, et al, "Reiki for the Treatment of Fibromyalgia: A Randomized Controlled Trial," *Journal of Alternative and Complementary Medicine* 14, no. 9 (November 2008): 1115–1122.

<sup>32</sup> The Center for Reiki Research, Center for Reiki Research Study Summary of "The Effect of Reiki on Pain and Anxiety in Women with Abdominal Hysterectomies" by A. T. Vitale and P. C. O'Conner, *Holistic Nursing Practice* 20, no. 6 (November – December 2006): 263-272. <u>http://www.centerforreikiresearch.org/RRdownloads/RRSummariesHysterectomies.pdf</u> (accessed 13 February 2015).

<sup>33</sup> Keith Filip, (physical therapist, Cleveland Clinic), interview by the author, 12 December 2014.

<sup>34</sup> Pamela Miles, "What Does the Research Say about Reiki?" University of Minnesota, <u>http://www.takingcharge.csh.umn.edu/explore-healing-practices/reiki/what-does-research-say-about-reiki</u> (accessed 12 December 2014).

<sup>35</sup> Lisa Gill, "More Hospitals Offer Alternative Therapies for Mind, Body, Spirit," *USA Today*, 15 September 2008, <u>http://usatoday30.usatoday.com/news/health/2008-09-14-alternative-therapies\_N.htm</u> (accessed 14 December 2014).

<sup>36</sup> National Center for Complementary and Alternative Medicine, "Complementary Health Practices for U.S. Military, Veterans and Families," U.S. Department of Health and Human Services, National Institutes of Health, <u>http://nccam.nih.gov/health/military-veteran</u> (accessed 1 October 2014).

<sup>37</sup> R. L. Tobin, P. J. Quartana, L. A. Riviere; K. C. Walper, and C. W. Hoge, "Chronic Pain and Opioid Use in U.S. Soldiers After Combat Deployment," *JAMA Internal Medicine* 174, no. 8 (August 2014): 1400-1401.

<sup>38</sup> Jennifer Svan, "Military Turns to Acupuncture as Alternative to Prescription Painkillers," *Stars and Stripes*, 27 August 2010, <u>http://www.stripes.com/military-turns-to-acupuncture-as-</u>alternative-to-prescription-painkillers-1.116167 (accessed 14 December 2014).

<sup>39</sup> Bob Brewin, "Pentagon Spent Over \$4Billion on Mental Health Treatment Between 2007 and 2012," *Nextgov*, <u>http://www.nextgov.com/health/2013/08/pentagon-spent-nearly-1-billion-mental-health-treatment-2012/69194/</u> (accessed 2 October 2014).

<sup>40</sup> The Center for Reiki Research, "Hospitals and Clinics that Offer Reiki Treatments," <u>http://www.centerforreikiresearch.org/HospitalList.aspx</u> (accessed 20 August 2014). The Center for Reiki Research identified more than 60 hospitals and clinics in Argentina, Belgium, Canada, Egypt, South Africa, the United Kingdom and the United States that offer Reiki.

<sup>41</sup> Kevin O'Reilly, "Demand Drives More Hospitals to Offer Alternative Therapies," *American Medical News*, 4 October 2011,

http://www.amednews.com/article/20111004/profession/310049996/8/ (accessed 14 December 2014).

<sup>42</sup> Alice Moore, "Reiki Energy Medicine: Enhancing the Healing Process," Hartford Hospital Department of Integrative Medicine, Hartford, CT,

http://www.harthosp.org/portals/1/images/38/reikienergymedicine.pdf (accessed 12 December 2014).

<sup>43</sup> Ibid.

<sup>44</sup> Hartford Hospital, "Integrative Medicine, Outcomes,"
 <u>http://www.harthosp.org/integrativemed/outcomes/default.aspx#outcome6</u> (accessed 29 October 2014). Measurements cited were obtained during the initial pilot phase of the study, December 1999 - December 2000.

<sup>45</sup> Ibid. Measurements cited were obtained after the pilot phase and expansion of the program, July – September, 2003.

<sup>46</sup> Dawn Marcus, Betsy Blazek-O'Neill, and Jennifer Kopar, "Symptomatic Improvement Reported After Receiving Reiki at a Cancer Infusion Center," *American Journal of Hospice and Palliative Medicine*, 5 December 2012, <u>https://reikiryoho.files.wordpress.com/2013/01/marcus-</u> <u>2012-improvement-cancer-reiki.pdf</u> (accessed 12 December 2014).

<sup>47</sup> U.S. News & World Report, "U.S. News Best Hospitals 2014-15," <u>http://health.usnews.com/best-hospitals/rankings</u> (accessed 14 December 2014).

<sup>48</sup> Deborah Bier, "Reiki Healing and Mental Health: What the Research Shows," PsychCentral, <u>http://psychcentral.com/lib/reiki-healing-and-mental-health-what-the-research-shows/00013092</u> (accessed 20 August 2014).

<sup>49</sup> Betsy Blazek-O'Neil, "Reiki for Relaxation and Health," The Gerald McGinnis Cardiovascular Institute Women's Heart Center News 3, Allegheny General Hospital (Pittsburgh PA).

<sup>50</sup> Oasis for Healing Volunteer Pilot Program, Yale-New Haven Hospital, Effects of Reiki and Guided Relaxation, Combined on Patients and Employees Stress/Anxiety, Fatigue, Discomfort/Pain, and Mood Level, research study, 2014.

<sup>51</sup> Brianna Sacks, "Reiki Goes Mainstream: Spiritual Touch Practice Now Commonplace in Hospitals," *The Washington Post*, 16 May 2014, <u>http://www.washingtonpost.com/national/religion/reiki-goes-mainstream-spiritual-touch-practice-now-commonplace-in-hospitals/2014/05/16/9e92223a-dd37-11e3-a837-8835df6c12c4\_story.html</u> (accessed 14 December 2014). <sup>52</sup> Reilly, Patricia, (Director of Caring and Healing Modalities, Brigham and Women's Hospital), interview by the author, 12 December 2014.

<sup>53</sup> Fernanda Clariana, (Volunteer Program Coordinator, Yale-New Haven Hospital), interview by the author, 16 February 2015.

<sup>54</sup> Luann Jacobs, (Educational Programs Coordinator, George Washington University Hospital), interview by the author, 16 February 2015.

<sup>55</sup> Reilly, Patricia, (Director of Caring and Healing Modalities, Brigham and Women's Hospital), interview by the author, 12 December 2014.

<sup>56</sup> The Chopra Center, "Ayurveda," <u>http://www.chopra.com/our-services/ayurveda</u> (accessed 13 December 2014).

<sup>57</sup> Peter Tyson, "The Hippocratic Oath Today," *NOVA*, <u>http://www.pbs.org/wgbh/nova/body/hippocratic-oath-today.html#modern</u> (accessed 13 February 2015).

<sup>58</sup> National Center for Complementary and Alternative Medicine, "Reiki: What You Need to Know," <u>http://nccam.nih.gov/health/reiki/introduction.htm</u> (accessed 21 December 2014).

<sup>59</sup> Sherry Mazzocchi, "Dr. Sheldon Feldman on Reiki and Surgery," *YouTube* video, <u>https://www.youtube.com/watch?v=X29PZzrgU4I</u> (accessed 16 December 2014).

<sup>60</sup> Evi Heilbrunn, "Top Health Insurance Companies," U.S. News and World Report, 5 November 2014, <u>http://health.usnews.com/health-news/health-insurance/articles/2013/12/16/top-health-insurance-companies</u> (accessed 20 December 2014). The top five health insurance providers in the United States are United Health Group, Kaiser Foundation Group, Wellpoint Inc. Group (Anthem), Aetna Group and Humana Group. A review of covered services on each company's website shows that acupuncture is not a covered service.

<sup>61</sup> Larraine M. Bossi, Mary Jane Ott, and Susan DeCristofaro, "Reiki as a Clinical Intervention in Oncology Nursing Practice," *Clinical Journal of Oncology Nursing* 12, no. 3 (June 2008): 489-494.

<sup>62</sup> Wounded Warrior Project, "Combat Stress Recovery Programs," <u>http://www.woundedwarriorproject.org/programs/combat-stress-recovery-program.aspx</u> (accessed 11 November 2014).

<sup>63</sup> University of Minnesota, "Pamela Miles," <u>http://www.takingcharge.csh.umn.edu/our-</u> <u>experts/pamela-miles</u> (accessed 21 December 2014).

<sup>64</sup> Pamela Miles, "What Does the Research Say about Reiki?" University of Minnesota, <u>http://www.takingcharge.csh.umn.edu/explore-healing-practices/reiki/what-does-research-say-about-reiki</u> (accessed 12 December 2014).

<sup>65</sup> Allegheny General Hospital Department of Integrated Medicine and Volunteer Services, *Reiki*, Reiki Brochure (Pittsburgh, PA: Allegheny General Hospital).

<sup>66</sup> N. Assefi, A. Bogart, J. Goldberg, et al, "Reiki for the Treatment of Fibromyalgia: a Randomized Controlled Trial," *Journal of Alternative and Complementary Medicine* 14, no. 9 (November 2008): 1115–1122.

<sup>67</sup> K. Olson, J. Hanson, and M. Michaud, "A Phase II Trial of Reiki for Management of Pain in Advanced Cancer Patients," *Journal of Pain and Symptom Management* 26, no. 5 (November 2003): 990–997.

 $^{68}$  A. G. Shore, "Long Term Effects of Energetic Healing on Symptoms of Psychological Depression and Self-Perceived Stress," *Alternative Therapies in Health and Medicine* 10, no. 3 (May 2004), 42–48. "Upon completion of treatment, there was a significant reduction in symptoms of psychological distress in treatment groups as compared with controls (P < .05; Eta square ranging from .09-.18), and these differences continued to be present 1 year later."

<sup>69</sup> D. Bowden, L. Goddard, and J. Gruzelier, "A Randomised Controlled Single-Blind Trial of the Efficacy of Reiki at Benefitting Mood and Well-Being," *Evidence-Based Complementary and Alternative Medicine* 2011, Article ID 381862, (2011), 8 pages. doi: 10.1155/2011/381862.

<sup>70</sup> L. J. Dressen, and S. Singg, "Effects of Reiki on Pain and Selected Affective and Personality Variables of Chronically III Patients," *Subtle Energies and Energy Medicine* 9 (1998): 51–83.

<sup>71</sup> P. S. So, Y. Jiang, and Y. Qin, "Touch Therapies for Pain Relief in Adults." *Cochrane Database of Systematic Reviews*, (2008), 4: CD006535. <u>www.thecochranelibrary.com</u> (accessed on 29 October 2014).

<sup>72</sup> Betty Hartwell and Barbara Brewitt, "The Efficacy of Reiki Hands on Healing: Improvements in Adrenal, Spleen and Nervous Function as Quantified by Electro-Dermal Screening," *Alternative Therapies Magazine* 3, no. 4 (July 1997): 89.

<sup>73</sup> K. Olson and J. Hanson, "Using Reiki to Manage Pain: A Preliminary Report," *Cancer Prevention Control* 1, no. 2 (June 1997): 108-13.

<sup>74</sup> Kimberly R. Pugh, "The Effect of Reiki on Decreasing Episodes of Insomnia and Improving Sleep Patterns," (PhD diss., Clayton College of Natural Health, 2004), 54-56. "The information in this study benefits individuals by offering a non-invasive, non-pharmacological means of decreasing or eliminating insomnia. Reiki for treatment of insomnia has the potential to improve a problematic situation and/or prevent potential acute and chronic health problems by returning the body to a state of mental, physical and spiritual homeostasis."

<sup>75</sup> N. E. Richeson, J. A. Spross, K. Lutz, and C. Peng, "Effects of Reiki on Anxiety, Depression, Pain and Physiological Factors in Community-Dwelling Older Adults," *Residential Gerontological Nursing* 10, no. 3 (July 2010): 187-99.

<sup>76</sup> S. C. Friedman, M. M. Burg, P. Miles, F. Lee, and R. Lampert, "Effects of Reiki on Autonomic Activity Early After Acute Coronary Syndrome," *Journal of the American College of Cardiology* 56, no. 12 (14 September 2010): 995-996.

<sup>77</sup> L. Díaz-Rodríguez, M. Arroyo-Morales, C. Fernández-de-las-Peñas, F. García-Lafuente, C. García-Royo, and I. Tomás-Rojas, "Immediate Effects of Reiki on Heart Rate Variability,

Cortisol Levels, and Body Temperature in Health Care Professionals with Burnout," *Biological Research for Nursing* 13, no. 4 (October 2011): 376-82.

<sup>78</sup> A. T. Vitale and P. C. O'Conner, "The Effect of Reiki on Pain and Anxiety in Women with Abdominal Hysterectomies," *Holistic Nursing Practice* 20, no. 6 (November – December 2006): 263-272.

<sup>79</sup> K. L. Tsang, L. E. Carlson, and K. Olson, "Pilot Crossover Trial of Reiki Versus Rest for Treating Cancer-Related Fatigue," *Integrative Cancer Therapy* 6, no. 1 (March 2007): 25-35.



# **Bibliography**

- Allegheny General Hospital Department of Integrated Medicine and Volunteer Services. *Reiki*. Reiki Brochure (Pittsburgh, PA: Allegheny General Hospital).
- Assefi, N., A. Bogart, J. Goldberg, et al. "Reiki for the Treatment of Fibromyalgia: A Randomized Controlled Trial." *Journal of Alternative and Complementary Medicine* 14, no. 9 (November 2008): 1115–1122.
- Bier, Deborah. "Reiki Healing and Mental Health: What the Research Shows." PsychCentral. <u>http://psychcentral.com/lib/reiki-healing-and-mental-health-what-the-research-shows/00013092</u> (accessed 20 August 2014).
- Blazek-O'Neil, Betsy. "Reiki for Relaxation and Health." The Gerald McGinnis Cardiovascular Institute Women's Heart Center News 3, Allegheny General Hospital (Pittsburgh PA).
- Bossi, Larraine M., Mary Jane Ott, and Susan DeCristofaro. "Reiki as a Clinical Intervention in Oncology Nursing Practice," *Clinical Journal of Oncology Nursing* 12, no. 3 (June 2008): 489-494.
- Bowden, D., L. Goddard, and J. Gruzelier. "A Randomised Controlled Single-Blind Trial of the Efficacy of Reiki at Benefitting Mood and Well-Being." *Evidence-Based Complementary and Alternative Medicine* 2011, Article ID 381862, 2011, 8 pages. doi: 10.1155/2011/381862.
- Brennan, Barbara. Interview by R. E. DiCarlo. "Conversations toward a New World View: Exploring the Human Energy System." *Healthy.net*. http://www.healthy.net/scr/Interview.aspx?Id=165 (accessed 3 October 2014).
- Brewin, Bob. "Pentagon Spent Over \$4 Billion on Mental Health Treatment between 2007 and 2012." *Nextgov*. <u>http://www.nextgov.com/health/2013/08/pentagon-spent-nearly-1-billion-mental-health-treatment-2012/69194/</u> (accessed 2 October 2014).
- Chandrasekaran, Rajiv. "A Legacy of Pain and Pride." *The Washington Post*, 29 March 2014. <u>http://www.washingtonpost.com/sf/national/2014/03/29/a-legacy-of-pride-and-pain/</u> (accessed 17 November 2014).
- Columbia Surgery. "Top Surgeon to Speak at Reiki Conference. Columbia University Department of Surgery, 13 July 2012. <u>http://www.columbiasurgery.net/2012/07/13/top-surgeon-to-speak-at-reiki-conference/</u> (16 December 2014).
- C-SPAN. "President Obama at American Legion Convention," 26 August 2014. <u>http://www.c-span.org/video/?321148-1/president-obama-speech-american-legion-convention</u> (accessed 12 January 2015).
- Díaz-Rodríguez, L., M. Arroyo-Morales, C. Fernández-de-las-Peñas, F. García-Lafuente, C. García-Royo, and I. Tomás-Rojas. "Immediate Effects of Reiki on Heart Rate Variability, Cortisol Levels, and Body Temperature in Health Care Professionals with Burnout." *Biological Research for Nursing* 13, no. 4 (October 2011): 376-82.
- Dressen, L. J. and S. Singg. "Effects of Reiki on Pain and Selected Affective and Personality Variables of Chronically III Patients." *Subtle Energies and Energy Medicine* 9 (1998): 51–83.

- Duke Integrative Medicine. "Wheel of Health." <u>http://www.dukeintegrativemedicine.org/about-us/what-is-integrative-medicine</u> (accessed 2 October 2014).
- Emedicinehealth, "Post-Traumatic Stress Disorder (PTSD)." <u>http://www.emedicinehealth.com/post-traumatic\_stress\_disorder\_ptsd/page3\_em.htm</u> (accessed 13 February 2015).
- Friedman, M. A., J. B. Detweiler-Bedell, H. E. Leventhal, R. Horne, G. I. Keitner, and I. W. Miller. "Combined Psychotherapy and Pharmacotherapy for the Treatment of Major Depressive Disorder." *Clinical Psychology: Science and Practice* 11 (2004): 47–68.
- Friedman, S. C., M. M. Burg, P. Miles, F. Lee, and R. Lampert. "Effects of Reiki on Autonomic Activity Early After Acute Coronary Syndrome," *Journal of the American College of Cardiology*, vo. 56, no. 12 (14 September 2010), 995-996.
- Gill, Lisa. "More Hospitals Offer Alternative Therapies for Mind, Body, Spirit." USA Today, 15 September 2008. <u>http://usatoday30.usatoday.com/news/health/2008-09-14-alternative-therapies\_N.htm</u> (accessed 14 December 2014).
- Hack, COL Dallas. Interview by Ashley Gilleland and Noel Gunther. "Survival Rates from Combat Wounds Keep Increasing." *Brainline Military*. <u>http://www.brainlinemilitary.org/content/multimedia.php?id=6337</u> (accessed 17 November 2014).
- Hartford Hospital. "Integrative Medicine, Outcomes." <u>http://www.harthosp.org/integrativemed/outcomes/default.aspx#outcome6</u> (accessed 29 October 2014).
- Hartwell, Betty and Barbara Brewitt. "The Efficacy of Reiki Hands on Healing: Improvements in Adrenal, Spleen and Nervous Function as Quantified by Electro-Dermal Screening." *Alternative Therapies Magazine* 3, no. 4 (July 1997): 89.
- Heilbrunn, Evi. "Top Health Insurance Companies." U.S. News and World Report, 5 November 2014. <u>http://health.usnews.com/health-news/health-insurance/articles/2013/12/16/top-health-insurance-companies</u> (accessed 20 December 2014).
- Lee, M. S., M. H. Pittler, and E. Ernst. "Effects of Reiki in Clinical Practice: A Systematic Review of Randomised Clinical Trials." *International Journal of Clinical Practice* 62, no. 6 (June 2008): 947–954.
- Marcus, Dawn, Betsy Blazek-O'Neill and Jennifer Kopar. "Symptomatic Improvement Reported after Receiving Reiki at a Cancer Infusion Center." *American Journal of Hospice and Palliative Medicine*, 5 December 2012.
   <u>http://ajh.sagepub.com/content/early/2012/12/04/1049909112469275</u> (accessed 12 December 2014).
- Mayo Clinic Staff. "Complementary and Alternative Medicine." Mayo Clinic. <u>http://www.mayoclinic.org/healthy-living/consumer-health/in-depth/alternative-medicine/art-</u> <u>20045267?pg=2</u> (accessed 20 August 2014).
- Mazzocchi, Sherry. "Dr. Sheldon Feldman on Reiki and Surgery." *YouTube* video. <u>https://www.youtube.com/watch?v=X29PZzrgU4I</u> (accessed 16 December 2014).

Medline Plus. "Pain and Your Emotions."

http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000417.htm (accessed 12 December 2014).

- Miles, Pamela. "What Does the Research Say about Reiki?" University of Minnesota. <u>http://www.takingcharge.csh.umn.edu/explore-healing-practices/reiki/what-does-research-say-about-reiki</u> (accessed 12 December 2014).
- Moore, Alice. "Reiki Energy Medicine: Enhancing the Healing Process." Hartford Hospital Department of Integrative Medicine, Hartford, CT. <u>http://www.harthosp.org/portals/1/images/38/reikienergymedicine.pdf</u> (accessed 12 December 2014).
- National Center for Complementary and Alternative Medicine. "Complementary Health Practices for U.S. Military, Veterans and Families." U.S. Department of Health and Human Services, National Institutes of Health. <u>http://nccam.nih.gov/health/military-veteran</u> (accessed 1 October 2014).
- National Center for Complementary and Alternative Medicine, "Reiki: What You Need to Know." <u>http://nccam.nih.gov/health/reiki/introduction.htm</u> (accessed 21 December 2014).
- National Institute of Mental Health. "Post-Traumatic Stress Disorder (PTSD)." National Institutes of Health. <u>http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml</u> (accessed 11 February 2015).
- National Intrepid Center of Excellence. <u>http://www.nicoe.capmed.mil/SitePages/Home.aspx</u> (accessed 16 September 2014).
- National Intrepid Center of Excellence. "Integrative Health Care Program." <u>http://www.nicoe.capmed.mil/Shared%20Documents/CAM\_Fact%20Sheet\_FINAL\_06%201</u> <u>8%2012.pdf</u> (accessed 16 September 2014).
- Oasis for Healing Volunteer Pilot Program, Yale-New Haven Hospital. Effects of Reiki and Guided Relaxation, Combined on Patients and Employees Stress/Anxiety, Fatigue, Discomfort/Pain, and Mood Level. Research study, 2014.
- Olson, K. and J. Hanson. "Using Reiki to Manage Pain: A Preliminary Report." *Cancer Prevention Control* 1, no. 2 (June 1997): 108-13.
- Olson, K., J. Hanson, and M. Michaud. "A Phase II Trial of Reiki for Management of Pain in Advanced Cancer Patients." *Journal of Pain and Symptom Management* 26, no. 5 (November 2003): 990–997.
- O'Reilly, Kevin. "Demand Drives More Hospitals to Offer Alternative Therapies." American Medical News, 4 October 2011. <u>http://www.amednews.com/article/20111004/profession/310049996/8/</u> (accessed 14 December 2014).
- Pugh, Kimberly R. "The Effect of Reiki on Decreasing Episodes of Insomnia and Improving Sleep Patterns." PhD diss., Clayton College of Natural Health, 2004.

- Raddatz, Martha, Hank Disselkamp, Richard Coolidge and Jordyn Phelps. "Damaged but Not Defeated: The Story of Two Wounded Warriors Overcoming Their Injuries." *ABC News*, 24 May 2013. <u>http://abcnews.go.com/GMA/video/wounded-warriors-overcome-injuries-19251375</u> (accessed 12 December 2014).
- Richeson, N. E., J. A. Spross, K. Lutz and C. Peng. "Effects of Reiki on Anxiety, Depression, Pain and Physiological Factors in Community-Dwelling Older Adults." *Residential Gerontological Nursing* 10, no. 3 (July 2010): 187-99.
- Sacks, Brianna. "Reiki Goes Mainstream: Spiritual Touch Practice Now Commonplace in Hospitals." *The Washington Post*, 16 May 2014. <u>http://www.washingtonpost.com/national/religion/reiki-goes-mainstream-spiritual-touchpractice-now-commonplace-in-hospitals/2014/05/16/9e92223a-dd37-11e3-a837-8835df6c12c4\_story.html (accessed 14 December 2014).</u>
- Samueli Institute. "PTSD Symptoms in Combat-Exposed Military Reduced with Healing Touch & Guided Imagery." <u>http://samueliinstitute.org/File%20Library/For%20Military/Healing-Touch-PTSD-FINAL.pdf</u> (accessed 21 December 2014).
- Sarris, J., et al. "Integrative Mental Healthcare White Paper: Establishing a New Paradigm through Research, Education, and Clinical Guidelines". *Advances in Integrated Medicine* 1, no. 1, (January 2014): 9-16. <u>http://dx.doi.org/10.1016/j.aimed.2012.12.002</u> (accessed 2 October 2014).
- Shane, Leo, III. "Report: Suicide Rate Spikes among Young Veterans." *Stars and Stripes*, 9 January 2014. <u>http://www.stripes.com/report-suicide-rate-spikes-among-young-veterans-1.261283</u> (accessed 17 November 2014).
- Shore, A. G. "Long Term Effects of Energetic Healing on Symptoms of Psychological Depression and Self-Perceived Stress." *Alternative Therapies in Health and Medicine* 10, no. 3 (May 2004): 42–48.
- Singg, S. "Reiki: An Alternative and Complementary Healing Therapy." In Carol M. Davis, ed. *Complementary Therapies in Rehabilitation*. 2d edition. Thorofare, NJ: SLACK Incorporated, 2004.
- So, P. S., Y. Jiang, and Y. Qin. "Touch Therapies for Pain Relief in Adults." *Cochrane Database of Systematic Reviews*. 2008: (4):CD006535. <u>www.thecochranelibrary.com</u> (accessed on 29 October 2014).
- Stanford Medicine News Center. "Norman Shumway, Heart Transplantation Pioneer, Dies at 83." <u>http://med.stanford.edu/news/all-news/2006/02/norman-shumway-heart-transplantation-pioneer-dies-at-83.html</u> (accessed 14 December 2014).
- Svan, Jennifer. "Military Turns to Acupuncture as Alternative to Prescription Painkillers." *Stars and Stripes*, 27 *August 2010*. <u>http://www.stripes.com/military-turns-to-acupuncture-as-</u> <u>alternative-to-prescription-painkillers-1.116167</u> (accessed 14 December 2014).
- Tanielian, Terri and Lisa H. Jaycox, editors. Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery. Santa Monica, CA: RAND Center for Military Health Policy Research, 2008.

- The Center for Reiki Research. "Hospitals and Clinics that Offer Reiki Treatments." <u>http://www.centerforreikiresearch.org/HospitalList.aspx</u> (accessed 20 August 2014).
- The Center for Reiki Research. Center for Reiki Research Study Summary of "The Effect of Reiki on Pain and Anxiety in Women with Abdominal Hysterectomies" by A. T. Vitale and P. C. O'Conner. *Holistic Nursing Practice* 20, no. 6 (November – December 2006): 263-272. <u>http://www.centerforreikiresearch.org/RRdownloads/RRSummariesHysterectomies.pdf</u> (accessed 13 February 2015).
- The Chopra Center. "Ayurveda." <u>http://www.chopra.com/our-services/ayurveda</u> (accessed 13 December 2014).
- Tobin, R. L., P. J. Quartana, L. A. Riviere; K. C. Walper, and C. W. Hoge. "Chronic Pain and Opioid Use in U.S. Soldiers after Combat Deployment." *JAMA Internal Medicine* 174, no. 8 (August 2014): 1400-1401.
- Tsang, K. L., L. E. Carlson, and K. Olson. "Pilot Crossover Trial of Reiki Versus Rest for Treating Cancer-Related Fatigue." *Integrative Cancer Therapy* 6, no.1 (March 2007): 25-35.
- Tyson, Peter. "The Hippocratic Oath Today." *NOVA*. <u>http://www.pbs.org/wgbh/nova/body/hippocratic-oath-today.html#modern</u> (accessed 13 February 2015).U.S. News & World Report.
- University of Minnesota. "Pamela Miles." <u>http://www.takingcharge.csh.umn.edu/our-experts/pamela-miles</u> (accessed 21 December 2014).
- U.S. News & World Report. "U.S. News Best Hospitals 2014-15." http://health.usnews.com/best-hospitals/rankings (accessed 14 December 2014).
- Vitale, A. T., and P. C. O'Conner. "The Effect of Reiki on Pain and Anxiety in Women with Abdominal Hysterectomies." *Holistic Nursing Practice* 20, no. 6 (November December 2006): 263-272.
- Wounded Warrior Project. "Combat Stress Recovery Programs." <u>http://www.woundedwarriorproject.org/programs/combat-stress-recovery-program.aspx</u> (accessed 11 November 2014).

Wounded Warrior Project. "Who We Serve." <u>http://www.woundedwarriorproject.org/mission/who-we-serve.aspx</u> (accessed 11 November 14).

Young, Lauren. "What is Biofield Therapy?" *Dr. Frank Lipman, The Voice of Sustainable Wellness,* 28 November 2014. <u>http://www.drfranklipman.com/what-is-biofield-therapy/</u> (accessed 12 January 2015).